

Use of Evidence-based Strategies in Reducing Healthcare-Associated Infections

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- MAIs are a leading cause of death in the US and cause needless suffering and expense.
- It is estimated that 1 in 20 U.S. hospitalized patients will acquire an HAI.
- 29,000 deaths; \$26-33 billion in excess costs
- While this data is specific to acute care hospital patients, HAIs can occur in any healthcare setting including long-term care facilities (LTCFs).

SOURCE: NCHS 2009; Tsan, AJIC, 2008; Klevens, Semin Dialysis, 2008; PA PSA Annual report 2009; Klevins, Pub Health Report 2007 Thompson, Ann Intern Med 2009 MMWR May 16, 2008; 57:19 Kallen, 19th Annual SHEA





Long-Term Care

When a nursing home resident is hospitalized with a primary diagnosis of infection, the death rate can reach as high as 40 percent.







Dialysis

More than 5,000 Hemodialysis centers nationwide:

Incidence of methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infection: 100 x greater than in nondialysis population







Estimated Burden of MDROs in Healthcare Facilities in the US

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Morbidity

- №86 percent of all invasive MRSA infections are healthcareassociated.





Morbidity

Of the HAIs reported to the National Healthcare Safety Network from 2006-2007:

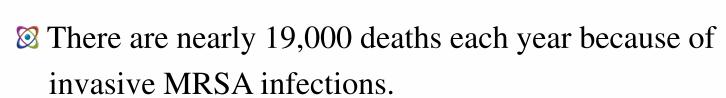
22 49-65% of healthcare-associated *S. aureus* infections were caused by MRSA.







Mortality



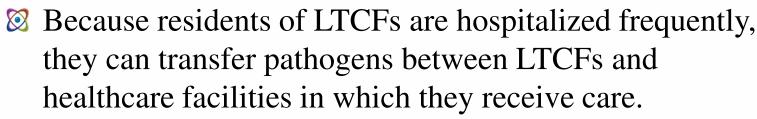


2 Patients with bloodstream infections or surgical site infections caused by MRSA have a higher risk of death compared with patients with infections caused by a strain of *Staphylococcus aureus* (staph) that does not have resistance to antibiotics.





Transmission Between Facilities



Mospitals can transmit pathogens to hospitalized LTCF patients who then take them back to the LTCF.











HAI Type	Cost in Dollars
MRSA Infection	\$35,000-\$60,000
C.diff Infection (CDI)	\$18,000-\$90,000
Surgical Site Infection (SSI) (Knee or Hip)	\$30,000-\$50,000
Central Line Associated Blood Stream Infection (CLABSI)	\$16,000-\$20,000
Catheter associated Urinary Tract Infection (CAUTI)	\$5,000-\$10,000
Ventilator associated pneumonia (VAP)	\$15,000-\$25,000

Infect Control Hosp Epidemiol 2010; 31:365-373

J Hosp Infect. 2010 Apr;74(4):309-18

Merollini et al. BMC Health Services Research 2013, 13:91

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6008a4.htm http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf





Clostridium difficile

- 250,000 infections per year requiring hospitalization or affecting already hospitalized patients.
- 2 14,000 deaths per year.
- At least \$1 billion in excess medical costs per year.
- Deaths related to *C. difficile* increased 400% between 2000 and 2007, in part because of a stronger bacteria strain that emerged.
- Almost half of infections occur in people younger than 65, but more than 90% of deaths occur in people 65 and older.









National Action Plan

- In recognition of HAIs as an important public health and patient safety issue, the U.S. Department of Health and Human Services (HHS) convened the Federal Steering Committee for the Prevention of Healthcare-Associated Infections.
- The Steering Committee's charge is to coordinate and maximize the efficiency of prevention efforts across the federal government.
- Mailer hai.asp





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National Action Plan (cont.)

- Since the publication of the first phase of the National Action Plan in 2009, which focused on the acute care setting, there **has** been growing awareness of the need for a chapter to address LTCFs.
- A growing number of individuals are receiving care in LTCFs, and it is projected that by 2030 more than 5 million Americans will reside in nursing homes/skilled nursing facilities (NHs/SNFs).
- These trends create an increased risk for HAIs, which can worsen health status and increase healthcare costs.





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Metric	Baseline	5-Year Target	Metric	Target SIR or Rate
CLABSI		50% reduction	SIR	0.50
CAUTI		25% reduction	SIR	0.75
SSI		25% reduction	SIR	0.75
MRSA bacteremia		25% reduction	SIR	0.75
Invasive MRSA infections (population)	2007–08	50% reduction	Rate	13.5 per 100,000
CDI	2010–11	30% reduction	SIR	0.70

Source: CDC





What is the Standardized Infection Ratio?

- The standardized infection ratio (SIR) is a summary measure used to track HAIs over time. It compares actual HAI rates in a facility or state with baseline rates in the general U.S. population. The Centers for Disease Control (CDC) adjusts the SIR for risk factors that are most associated with differences in infection rates.
- In other words, the SIR takes into account that different healthcare facilities treat different types of patients. For example, HAI rates at a hospital that has a large burn unit (where patients are at higher risk of acquiring infections) can not be directly compared to a hospital that does not have a burn unit.





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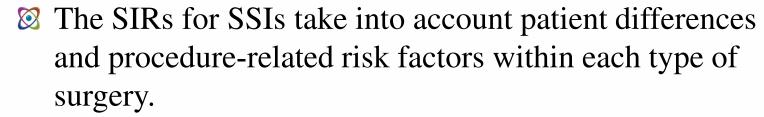
How Does the CDC Calculate the SIR?

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- The SIRs for CLABSIs and CAUTIs are adjusted by type of patient care location, hospital affiliation with a medical school and bed size of the patient care location.
- MRSA bloodstream infections are adjusted using slightly different risk factors such as facility bed size, hospital affiliation with a medical school, the number of patients admitted to the hospital who already have CDI or an MRSA bloodstream infection ("community-onset" cases) and adjusts for the type of test the hospital laboratory uses to identify *Clostridium difficile* from patient specimens.





Surgical Site Infections (SSIs)



These risk factors include duration of surgery, surgical wound class, use of endoscopes, re-operation status, patient age and patient assessment at time of anesthesiology.







Phase 1: Acute Care Hospital (ACH) Measures



- Central line-Associated Bloodstream Infections (CLABSI)
- SSIs
- Methicillin-Resistant Staph aureus (MRSA)
- Mealth Care Worker (HCW) Influenza Vaccination Rates





Phase 2: Ambulatory Surgery Centers

SSI SSI

- **10** Dialysis Centers:
 - Use of IV Antibiotics
 - Positive Blood Cultures
 - Vascular Access Infection
- **Inpatient Rehabilitation Facilities:**
 - CAUTI





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Phase 3 : Long-term Care Facilities

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Proposed:

- **Ø** CAUTI
- **100** Resident and Influenza Vaccination Rates
- Mates HCW Influenza Vaccination Rates









They decided to focus on the NHs and SNFs settings and the five priority areas and goals:

- **NHSN** enrollment
- ☑ Urinary tract infections (UTIs)/CAUTIs
- **Ø** CDI
- Resident Influenza and Pneumococcal vaccination
- Mealthcare personnel Influenza vaccination

These were intended not as a final goal but as a first step.





Restructuring the QIO Program

- The Centers for Medicare & Medicaid Services (CMS) awarded contracts as part of restructuring the Quality Improvement Organization (QIO) Program to improve care for beneficiaries, families and caregivers.
- QIOs are private, mostly not-for-profit organizations staffed by doctors and other health care professionals trained to review medical care and help beneficiaries with complaints about the quality of care and to implement improvements in the quality of care available throughout the spectrum of care.







QIN-QIOs

- The new contracts were awarded to fourteen organizations. The awardees will work with providers and communities across the country on data-driven quality initiatives. These QIOs will be known as Quality Innovation Network (QIN)-QIOs.
- QIN-QIO projects will be based in communities, health care facilities and clinical practices. They will drive quality by providing technical assistance, convening learning and action networks for sharing best practices, collecting and analyzing data for improvement.









- **②** Each QIN-QIO will work on common strategic initiatives:
 - reducing HAIs
 - reducing readmissions and medication errors
 - improving care for nursing home residents
 - supporting use of interoperable health information
 - promoting prevention activities
 - reducing cardiac disease and diabetes
 - reducing health care disparities
 - improving patient and family engagement
- QIN-QIOs will also provide technical assistance for improvement in CMS value based purchasing programs.







QIN-QIO Awarded Contracts

11 th Statement of Work Quality Innovation Network					
Quality Impro	vement Or	ganization Program Contracts			
Quality Innovation Network (QIO)	States	Quality Innovation Network (QIO) con't	States		
			con't		
Great Plains Quality Innovation Network	KS	Mountain Pacific Quality Health Foundation	AK		
	ND		HI		
	NE		MT		
	SD		WY		
TMF	AR	Atlantic Quality Improvement Network	DC		
	MO		NY		
	OK		SC		
	TX				
Lake Superior Quality Innovation	MN	Quality Insights Quality Innovation Network	DE		
Network/Stratis Health	WI		LA		
	MI		NJ		
			PA		
			WV		
Telligen	CO	VHQC	MD		
	IA		VA		
	IL				
HealthInsight	NM	Qualis Health	ID		
	NV		WA		
	OR				
	UT				
Alliant-Georgia Medical Care Foundation	GA	Health Services Advisory Group	AZ		
	NC		CA		
			FL		
			OH		
atom Alliance	AL	HealthCentric Advisors	CT		
	KY		MA		
	MS		ME		
	TN		NH		
			RI		
			VT		

SOURCE: CMS







QIN-QIOs Work to Reduce HAIs

- Work with participating providers to:
 - Comply with meaningful use through antimicrobial stewardship programs
 - Examine the role of improved care transitions in HAI reduction
 - Emphasize the importance of vaccination health
 - Facilitate collaborative ties with partners in the healthcare community
 - Focus on appropriate medication use in HAI prevention
 - Tracking HAIs in multiple settings
 - Employing methods to ensure updated immunization status







What is atom Alliance?

- atom Alliance is a multi-state initiative, composed of three healthcare quality improvement consultancy organizations, who have joined forces to win a five-year QIN-QIO contract from CMS.
- Under provisions of the new contract, atom Alliance will work to improve healthcare quality for Medicare patients and their families in Alabama, Indiana, Kentucky, Mississippi and Tennessee.









Quality Improvement Organizations (QIOs)

- QIN-QIOs shall align where possible with the 5-year HHS goals for HAI reduction and with other public and private initiatives such as:
 - CDC sponsored state based HAI initiatives
 - Agency for Healthcare Research and Quality's (AHRQ) Comprehensive Unit-based Safety Program (CUSP) work
 - Institute for Healthcare Improvement (IHI) bundles







Information & Quality Healthcare (IQH)

IQH is committed to improving health quality at the community or local level.



IQH is a part of atom Alliance.





General HAI Tasks of IQH

- Provide education and training for participating providers, collaborative partners, beneficiaries, family members and/or patient advocates on infection transmission control practices such as catheter maintenance, environmental disinfection, hand hygiene, appropriate vaccination practices
- Work with AHRQ to educate and train on CUSP and/or TeamSTEPPS principles.







General HAI Tasks of IQH (cont.)

- Introduce and disseminate evidence-based tools for HAI prevention and reduction
- Maintain National Health Safety Network (NHSN) expertise by educating facilities on:
 - HAI definitions
 - Data reporting
 - Elements
 - Calculations
 - Changes as they evolve







Surveillance

"The unsettling truth is that our best estimates of healthcare-associated infections in long-term care facilities, such as nursing homes, most likely understate the true problem. Clinicians in nursing homes cannot prevent healthcare-associated infections unless they know where and how they are occurring. Tracking infections within facilities is the first step toward prevention and ultimately saves lives."

— Nimalie Stone, MDCDC Medical Epidemiologist







NHSN

- CDC's National Healthcare Safety Network (NHSN) is the nation's most widely used HAI tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts and ultimately eliminate healthcare-associated infections.
- In addition, NHSN allows healthcare facilities to track blood safety errors and important healthcare process measures such as healthcare personnel influenza vaccine status and infection control adherence rates.





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- NHSN provides medical facilities, states, regions, and the nation with data collection and reporting capabilities needed to:
 - identify infection prevention problems by facility, state, or specific quality improvement project
 - benchmark progress of infection prevention efforts
 - comply with state and federal public reporting mandates, and ultimately,
 - drive national progress toward elimination of HAIs.
- Beginning decades ago with 300 hospitals, NHSN now serves more than 12,000 medical facilities tracking HAIs.







Enrollment



To access or enroll your facility in NHSN's, see CDC's website:

http://www.cdc.gov/nhsn/enrollment/index.html





Benefits

- Additionally, with sufficient LTCF reporting data in the NHSN system, national HAI benchmarks can be determined, therefore allowing for meaningful interpretation of data and facilitating evaluation of the impact of implemented prevention efforts.
- Increases in the number of LTCFs using NHSN over time can be a way to track the successful implementation and adoption of the NHSN LTC Component.





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Acute Care Facilities

Reporting Requirements and Deadlines in NHSN per CMS Current Rules

Healthcare Settings	NHSN Event	CMS Reporting Deadlines
Acute Care Facilities that participate in CMS Hospital IQR Program "Medicare beneficiary	CLABSI	Q1 (JanMarch): August 15
	Start Q1 2011 - adult, pediatric, and neonatal ICUs	Q2 (April-June): November 15
	Start Q1 2015 - adult and pediatric medical, surgical, and medical/surgical wards	Q3 (JulSept.): February 15 Q4 (OctDec.): May 15
number required for all applicable patients		
beginning July 2014*	CAUTI	Q1 (JanMarch): August 15
	Start Q1 2012 - adult and pediatric ICUs	Q2 (April-June): November 15
	Start Q1 2015 - adult and pediatric medical, surgical, and medical/surgical wards	Q3 (JulSept.): February 15 Q4 (OctDec.): May 15
	SSI (following COLO Procedures)	Q1 (JanMarch): August 15
	(Start Q1 2012)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (OctDec.): May 15
	SSI (following HYST Procedures)	Q1 (JanMarch): August 15
	(Start Q1 2012)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15 Q4 (OctDec.): May 15
		Gr (GLC-GRC). Hilly 23
	MRSA Bacteremia LabID Event (FacWideIN)	Q1 (JenMerch): August 15
	(Start Q1 2013)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (Oct-Dec.): May 15
		and the second s
	C. difficile LabID Event (FacWideIN)	Q1 (JanMarch): August 15
	(Start Q1 2013)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (OctDec.): May 15
	Healthcare Personnel Influenza Vaccination	Q4 (OctDec.) - Q1 (JanMarch): May 15
	(Start Q1 2013)	











Outpatient Dialysis, LTACs, IRFs

Healthcare Settings	NHSN Event		CMS Reporting Deadlines		
Outpatient Dialysis Facilities that participate in CMS ESRD	Dialysis Event (includes Positive blood culture, I.V. antimicrobial start, and Signs of vascular access infection)		Q1-Q4 2012 (JanDec.: 3 month minimum): April 30, 2013		
QIP Program	(Start 2012)		Q1-Q4 2013 (JanDec.: 6 month minimum): April 15, 2014		
Long-term Acute Care	CLABSI (all bedded inpatient		2 - Q4 2013	Starting Q1 2014	
Facilities (LTACs) that	care locations)	Q1 (JanMar	ch): August 15	Q1 (JanMarch): May 15	
participate in CMS	(Start Q4 2012)	Q2 (April-Jun	e): November 15	Q2 (April-June): August 15	
LTCHQR Program		Q3 (JulSept	.): February 15	Q3 (JulSept.): November 15	
*Starting January 2014,		Q4 (OctDec	.): May 15	Q4 (OctDec.): February 15	
reporting deadline will be					
1.5 months after the end	CAUTI (all bedded inpatient care	Q4 201	2 - Q4 2013	Starting Q1 2014	
of the quarter*	locations)	Q1 (JanMarch): August 15		Q1 (JanMarch): May 15	
Data from Q4 2013 & Q1 2014	(Start Q4 2012)	Q2 (April-June): November 15 Q2 (Q2 (April-June): August 15	
are both due on May 15, 2014		Q3 (JulSept.): February 15		Q3 (Jul-Sept.): November 15	
		Q4 (OctDec.): May 15		Q4 (OctDec.): February 15	
	de foer-perl; mak 12			action confirmation and	
	MRSA Bacteremia LabID Event	Q1 (JanMar	ch): May 15		
	(FacWideIN)	Q2 (April-June): August 15			
	(Start Q1 2015)		: November 15 : February 15		
		Q4 (OctDec			
	C. difficile LabID Event	Q1 (JanMar	ch): May 15		
	(FacWideIN)	Q2 (April-Jun	e): August 15		
	(Start Q1 2015)	Q3 (JulSept	.): November 15		
		Q4 (OctDec	.): February 15		
	Healthcare Personnel Influenza	OA IOM D	1 - 04 (lan 45 1	0. May 15	
	Vaccination	Q4 (OctDec.) - Q1 (JanMarch): May 15		i): May 15	
	(Start Q4 2014)				
Inpatient Rehabilitation	ies (IRFs) that (Start Q4 2012) ipate in CMS y Reporting		ns) Q1 (JanMarch): August 15		
participate in CMS			Q2 (April-June): November 15		
Quality Reporting			Q3 (JulSept.): February 15		
Program			Q4 (OctDec.): May 15		
	Healthcare Personnel Influenza Vaccination		Q4 (OctDec.) - Q1 (JanMarch): May 15		
	(Start Q4 2014)				









PPS-Exempt Cancer Hospital Quality Reporting (*PCHQR*) Program



Healthcare Settings	NHSN Event	CMS Reporting Deadlines
PPS-Exempt Cancer	CLABSI (all bedded inpatient care locations)	Q1 (JanMarch): August 15
Facilities that participate in CMS	(Start Q1 2013)	Q2 (April-June): November 15
PCHQR Program		Q3 (JulSept.): February 15
		Q4 (Oct-Dec.): May 15
	CAUTI (all bedded inpatient care locations)	Q1 (JanMarch): August 15
	(Start Q1 2013)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (Oct-Dec.): May 15
	SSI (following COLO Procedures)	Q1 (JanMarch): August 15
	(Start Q1 2014)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (OctDec.): May 15
	SSI (following HYST Procedures)	Q1 (JanMarch): August 15
	(Start Q1 2014)	Q2 (April-June): November 15
		Q3 (JulSept.): February 15
		Q4 (Oct-Dec.): May 15





CUSP

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- Mark the http://www.onthecuspstophai.org
- As part of this action plan, the Agency for Healthcare Research and Quality (AHRQ) increased support and scope of a project funded in 2008 to reduce central line-associated bloodstream infections (CLABSI) and funded a second initiative to reduce catheter-associated urinary tract infections (CAUTI).
- Both of these projects, *On the CUSP: Stop BSI* and *On the CUSP: Stop CAUTI*, apply the Comprehensive Unit-based Safety Program (CUSP) to improve the culture of patient safety and implement evidence-based best practices to reduce the risk of infections.





What Is a Bundle?

- A bundle is a structured way of improving the processes of care and patient outcomes: a small, straightforward set of evidence-based practices generally three to five that, when performed collectively and reliably, have been proven to improve patient outcomes.
- Institute for Healthcare Improvement (IHI) Vice President and patient safety expert, Carol Haraden, PhD, comments on the power and popularity of "bundles" in improvement initiatives. "While the allure of this tool is undeniable," says Haraden, "quality teams should resist the impulse to label any list of good changes a bundle."







VAP Bundle

- The IHI Ventilator Bundle a grouping of best practices that, when applied together, may result in substantially greater improvement has been implemented in many ICUs, along with teamwork and communication strategies such as structured multidisciplinary rounds and daily goal setting, to wean and remove patients from ventilators as quickly as possible, while providing evidence-based care.
- Mark the http://www.ihi.org/topics/vap/pages/default.aspx







TeamSTEPPS

- http://teamstepps.ahrq.gov/
- **TeamSTEPPS** is a teamwork system designed for health care professionals that is:
 - A powerful solution to improve patient safety within your organization.
 - An evidence-based teamwork system to improve communication and teamwork skills among health care professionals.
- **Are You Ready for TeamSTEPPS?**
 - Use the <u>TeamSTEPPS Readiness Assessment Tool</u> to determine your organization's readiness to begin implementing the TeamSTEPPS process







HAI Learning & Action Networks (LANs)

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One strategy used to drive change is to bring together local communities to problem-solve, learn from one another, and create solutions to improve how care is delivered, called learning and action networks:

- 2 Participants can connect with peers for mentoring.
- ② Offer collaborative and educational benefits that make use of evidence-based medicine to improve quality of care.





HAI Specific Tasks

QIN-QIOs will work to reduce the following HAIs in hospitals (ICU and non-ICU wards):

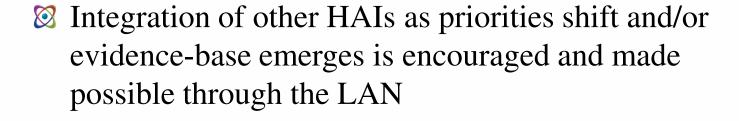
- © Central line bloodstream infections (CLABSI)
- © Clostridium difficile infections (CDI)
- Ventilator-Associated Events (VAE)







HAI Specific Tasks (cont.)





- The use of evidence-based strategies such as guidelines for infection control released by the CDC
- Operational principles such as TeamSTEPPS that promote a culture of safety within a healthcare institution





Patient Engagement

The QIN-QIO shall monitor and report out the degree in which hospital providers engage beneficiaries/patients and/or their family members and/or patient representatives in the following activities:

- Prior to admission, a discharge planning check list (such as CMS Discharge Planning Checklist available at http://www.medicare.gov/Pubs/pdf/11376.pdf) is provided to every patient that has a scheduled admission.







Patient Engagement (cont.)

- Dedicates a person or functional area that is proactively responsible for Patient and Family Engagement and evaluates their activities regularly.
- Mas an active Patient and Family Engagement Committee OR at least one former patient that serves on a patient safety or quality improvement committee or team.
- Mas one or more patient(s) who serve on a Governing and/or Leadership Board and serves as a patient representative.







Discharge Planning Checklist Instructions



Your Discharge Planning Checklist:

For patients and their caregivers preparing to leave a hospital, nursing home, or other care setting











Reason for	admission:				_

During your stay, your doctor and the staff will work with you to plan for your discharge. You and your caregiver (a family member or friend who may be helping you) are important members of the planning team. You and your caregiver can use this checklist to prepare for discharge.

Instructions:

- · Use this checklist early and often during your stay.
- Talk to your doctor and the staff (like a discharge planner, social worker, or nurse)
 about the items on this checklist.
- Check the box next to each item when you and your caregiver complete it.
- Use the notes column to write down important information (like names and phone numbers).
- . Skip any items that don't apply to you.

Notes
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SOURCE: CMS





Action Items/Information



	Action items	Notes
	Use "My drug list"on page 5 to write down your prescription drugs, over-the-counter drugs, vitamins, and herbal supplements.	
[Review the list with the staff.	
[☐ Tell the staff what drugs, vitamins, or supplements you took before you were admitted. Ask if you should still take these after you leave.	
[□ Write down a name and phone number of a person to call if you have questions.	
Reco	overy & support	
_	Ask if you'll need medical equipment (like a walker). Who will arrange for this? Write down a name and phone number of a person you can call if you have questions about equipment.	
	Ask if you're ready to do the activities below. Circle the ones you need help with, and tell the staff:	
	Bathing, dressing, using the bathroom, climbing stairs Cooking, food shopping, house cleaning, paying bills	
•	Getting to doctors' appointments, picking up prescription drugs	
	Make sure you have support (like a caregiver) in place that can help you. See "Resources" on page 6 for more information.	
_	Ask the staff to show you and your caregiver any other tasks that require special skills (like changing a bandage or giving a shot). Then, show them you can do these tasks. Write down a name and phone	
	number of a person you can call if you need help.	
_	Ask to speak to a social worker if you're concerned about how you and your family are coping with your illness. Write down information about support groups and other resources.	
	Talk to a social worker or your health plan if you have questions about what your insurance will cover, and how much you'll have to pay. Ask about possible ways to get help with your costs.	

	Action items	Notes
	Ask for written discharge instructions (that you can read and understand) and a summary of your current health status. Bring this information and your completed "My drug list" to your follow-up appointments.	
	Use "My appointments" on page 5 to write down any appointments and tests you'll need in the next several weeks.	
F	or the caregiver	
1	Do you have any questions about the items on this checklist or on the discharge instructions? Write them down, and discuss them with the staff.	
	Can you give the patient the help he or she needs?	
	 □ What tasks do you need help with? □ Do you need any education or training? □ Talk to the staff about getting the help you need before discharge. □ Write down a name and phone number of a person you can call if you have questions. 	
	Get prescriptions and any special diet instructions early, so you won't have to make extra trips after discharge.	

More information for people with Medicare

If you need help choosing a home health agency or nursing home:

- · Talk to the staff.
- Visit Medicare.gov to compare the quality of home health agencies, nursing homes, dialysis facilities, and hospitals in your area.
- Call 1-800-MEDICARE (1-800-633-4227). TTY users should call 1-877-486-2048.

If you think you're being asked to leave a hospital or other health care setting (discharged) too soon:

You may have the right to ask for a review of the discharge decision by the Beneficiary and Family Centered Care
Quality Improvement Organization (BFCC-QIO) before you leave. A BFCC-QIO is a type of quality improvement
organization (a group of doctors and other health care experts under contract with Medicare) that reviews
complaints and quality of care for people with Medicare. To get the phone number for your BFCC-QIO, visit
Medicare.gov/contacts, or call 1-800-MEDICARE. You can also ask the staff for this information. If you're
in a hospital, the staff should give you a notice called "Important Message from Medicare," which contains
information on your BFCC-QIO. If you don't get this notice, ask for it.

For more information on your right to appeal, visit Medicare.gov/appeals, or visit Medicare.gov/publications to view the booklet "Medicare Appeals."









My drug list

Filled out on:

Fill out this list with all prescription drugs, over-the-counter drugs, vitamins, and herbal supplements you take. Review this list with the staff.

If you have Medicare and limited income and resources, you may qualify for Extra Help to pay for your Medicare prescription drug coverage. For more information about Extra Help, visit Medicare.gov/publications to view the booklet "Your Guide to Medicare Prescription Drug Coverage."

Drug name	What It does	Dose	How to take It	When to take It	Notes

My appointments

Appointments and tests	Date	Phone number

Resources

The agencies listed here have information on community services, (like home-delivered meals and rides to appointments). You can also get help making long-term care decisions. Ask the staff in your health care setting for more information.



Area Agencies on Aging (AAAs) and Aging and Disability Resource Centers (ADRCs):
Help older adults, people with disabilities, and their caregivers. To find the AAA or ADRC in your area.

Help older adults, people with disabilities, and their caregivers. To find the AAA or ADRC in your area, visit the Eldercare Locator at **eldercare.gov**, or call 1-800-677-1116.

Medicare: Provides information and support to caregivers of people with Medicare. Visit Medicare.gov/campaigns/caregiver/caregiver.html.

Long-Term Care (LTC) Ombudsman Program: Advocate for and promote the rights of residents in LTC facilities. Visit **ttcombudsman.org**.

Senior Medicare Patrol (SMP) Programs: Work with seniors to protect themselves from the economic and health-related consequences of Medicare and Medicaid fraud, error, and abuse. To find a local SMP program, visit smpresource.org.

Centers for Independent Living (CILs): Help people with disabilities live independently.

For a state-by-state directory of CILs, visit ilru.org/html/publications/directory/index.html.

State Technology Assistance Project: Has information on medical equipment and other assistive technology. Visit resna.org, or call 1-703-524-6686 to get the contact information in your state.

National Long-Term Care Clearinghouse: Provides information and resources to plan for your long-term care needs. Visit longtermcare.gov.

National Council on Aging: Provides information about programs that help pay for prescription drugs, utility bills, meals, health care, and more. Visit benefitscheckup.org.

State Health Insurance Assistance Programs (SHIPs): Offer counseling on health insurance and programs for people with limited income. Also help with claims, billing, and appeals. Visit Medicare.gov/contacts, or call 1-800-MEDICARE (1-800-633-4227) to get your SHIP's phone number. TTY users should call 1-877-486-2048.

State Medical Assistance (Medicaid) Office: Provides information about Medicaid. To find your local office, visit Medicare.gov/contacts, or call 1-800-MEDICARE.

CMS Product No. 11376 Revised August 2014

The information in this booklet describes the Medicare program at the time this booklet was printed. Changes may occur after printing. Visit Medicare, gov, or call 1.800.MEDICARE (1.800.633.4227) to get the most current information. TTY users should call 1.877.486.2048.

"Your Discharge Planning Checklist" isn't a legal document. Official Medicare Program legal guidance is contained in the relevant statutes, regulations, and nalings.

SOURCE: CMS





What is APIC?

- The Association for Professionals in Infection Control and Epidemiology (APIC) is the leading professional association for infection preventionists (IPs) with more than 15,000 members.
- Most APIC members are nurses, physicians, public health professionals, epidemiologists, microbiologists, or medical technologists who:
 - Collect, analyze, and interpret health data in order to track infection trends, plan appropriate interventions, measure success, and report relevant data to public health agencies.







What is APIC? (cont.)

- **Most APIC members...:**
 - Establish scientifically based infection prevention practices and collaborate with the healthcare team to assure implementation.
 - Work to prevent healthcare-associated infections (HAIs) in healthcare facilities by isolating sources of infections and limiting their transmission.
 - Educate healthcare personnel and the public about infectious diseases and how to limit their spread.







APIC Guides

The APIC guidelines are available for download or purchase at www.apic.org.

- ☑ Guide to the Elimination of Methicillin-Resistant Staphylococcus aureus (MRSA) Transmission in Hospital Settings, 2nd Edition (2010)
- © Guide to Preventing *Clostridium difficile* Infections (2013)









- © Guide to the Elimination of Infections in Hemodialysis (2010)
- © Guide to Preventing Catheter-Associated Urinary Tract Infections (2014)







HICPAC

The Healthcare Infection Control Practices Advisory Committee (HICPAC) is a federal advisory committee assembled to provide advice and guidance to the CDC and the DHHS regarding the practice of infection control and strategies for surveillance, prevention, and control of HAIs, antimicrobial resistance and related events in United States healthcare settings.





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HICPAC (cont.)

- The primary activity of the Committee is to provide advice on periodic updating of existing CDC guidelines and development of new CDC guidelines.
- Additionally, this advice may take the form of resolutions or informal communications.







Development of Key Questions

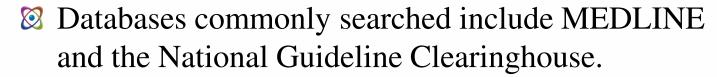
- Each HICPAC guideline begins with the drafting and refining of the key questions most critical to infection prevention and control personnel and providers for the given guideline topic.
- The working group first conducts a search of medical literature databases and websites for all relevant guidelines and narrative reviews on the topic of interest.

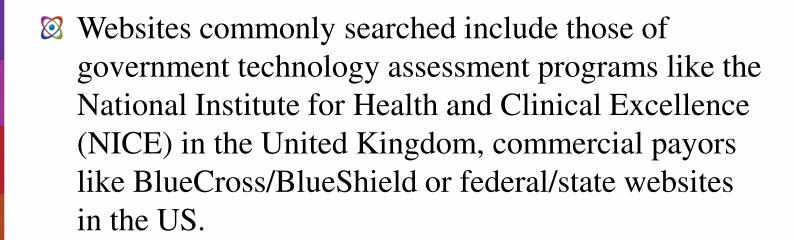


















Top CDC Recommendations to Prevent HAIs

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General Guidelines

Preventing Healthcare-Associated Infections

Council of State and Territorial Epidemiologists Workshop June 7, 2009

<u>Facilities</u> presents evidence-based recommendations on the preferred methods for cleaning, disinfection, and sterilization of patient-care medical devices and for cleaning and disinfecting the healthcare environment. In addition to updated recommendations, new topics are also addressed in this guideline.

©Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008







- Guidelines for Environmental Infection Control in Healthcare
 Facilities June 6, 2003 / 52(RR10);1-42 The Guidelines for
 Environmental Infection Control in Healthcare Facilities is a
 compilation of recommendations for the prevention and control
 of infectious diseases that are associated with healthcare
 environments. Available for download
- Recent developments in the field have stimulated a review of the scientific data regarding hand hygiene and the development of new guidelines designed to improve hand hygiene practices in healthcare facilities. Guidelines for Hand Hygiene in Healthcare Settings Published 2002 Oct. 25, 2002 / Vol. 51 / No. RR-16







Isolation Guidelines

2007 Guideline for Isolation Precautions: Preventing
Transmission of Infectious Agents in Healthcare Settings

This document is intended for use by infection control staff, healthcare epidemiologists, healthcare administrators, nurses, other healthcare providers, and persons responsible for developing, implementing, and evaluating infection control programs for healthcare settings across the continuum of care.

Complete PDF version available for download







Public Reporting

- Middle Guidance on Public Reporting of Healthcare-Associated

 Infections: Recommendations HICPAC has developed this guidance document based on established principles for public health and HAI reporting systems. This document is intended to assist policymakers, program planners, consumer advocacy organizations, and others tasked with designing and implementing public reporting systems for HAIs.

 Available for download
- Viral Hemorrhagic Fever in U.S. Hospitals May 2005. This document updates recommendations (MMWR 1995; 44 (25);475-9) for managing patients with suspected viral hemorrhagic fever (VHF) who are admitted to U.S. hospitals.





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Device-Associated Infection Prevention Guidelines

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<u>Guideline for Prevention of Catheter-Associated Urinary Tract</u>
 <u>Infections 2009</u>

In addition to updating the previous 1981 guideline, this revised guideline reviews the available evidence on CAUTI prevention for patients requiring chronic indwelling catheters and individuals who can be managed with alternative methods of urinary drainage (e.g., intermittent catheterization). The revised guideline also includes specific recommendations for implementation, performance measurement, and surveillance.

Available for download: <u>Guideline for Prevention of CAUTI</u>, 2009

Appendices - Guideline for Prevention of CAUTI, 2009





Device-Associated Infection Prevention Guidelines (cont.)

- **CAUTI Guideline Fast Facts**
- **Podcast: Dr. Sanjay Saint discusses Catheter-associated UTIs**
- - This report provides Healthcare practitioners with background information and specific recommendations to reduce the incidence of intravascular Catheter-Related Bloodstream Infections (CRBSI).
- Available for download: <u>Guideline for the Prevention of</u> Intravascular CRBSI, 2011





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Procedure-Associated Infection Prevention Guidelines

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© Guideline for the Prevention of Surgical Site Infection, 1999

This document is primarily intended for use by surgeons, operating room nurses, postoperative inpatient and clinic nurses, infection control professionals, anesthesiologists, healthcare epidemiologists and other personnel directly responsible for the prevention of nosocomial infections.





Procedure-Associated Infection Prevention Guidelines (cont.)

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<u>Solution</u> Solution

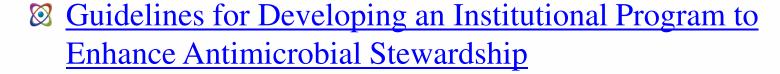
Solut Pneumonia, 2003 This report updates, expands, and replaces the previously published CDC "Guideline for Prevention of Nosocomial Pneumonia". The new guidelines are designed to reduce the incidence of healthcare-associated pneumonia and other severe, acute lower respiratory tract infections in acute-care hospitals and in other Healthcare settings (e.g., ambulatory and long-term care institutions) and other facilities where healthcare is provided.

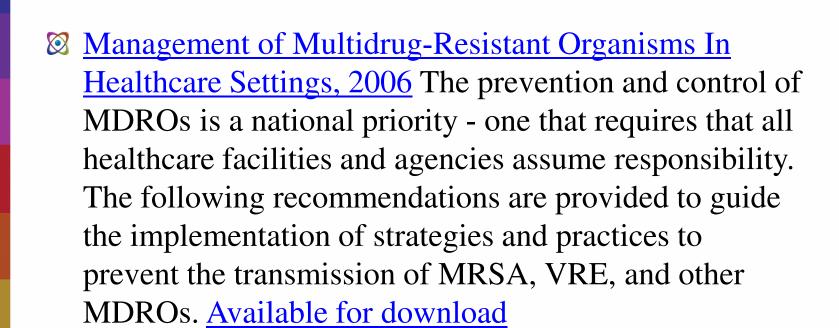
Download the complete guideline





Drug-Resistant Organisms











Drug-Resistant Organisms (cont.)

<u>Solution of Solutions With Carbapenem-</u> Resistant or Carbapenemase-Producing Enterobacteriaceae in Acute Care Facilities MMWR March 20, 2009 / 58(10);256-260 In light of the clinical and infection control challenges posed by CRE and advances in the ability to detect these pathogens, CDC and HICPAC have developed new guidance for CRE infection prevention and control in an effort to limit the further emergence of these organisms. These recommendations are based on strategies outlined in the 2006 HICPAC guidelines for management of multidrug-resistant organisms in Healthcare settings. Available for download







Drug-Resistant Organisms (cont.)

Public Health update of Carbapenem-Resistant

Enterobacteriaceae (CRE) producing metallo-betalactamases (NDM, VIM, IMP) in the U.S. reported to CDC









CDC staff show two plates growing bacteria in the presence of discs containing various antibiotics.

The isolate on the left plate is susceptible to the antibiotics on the discs and is therefore unable to grow around the discs.

The one on the right has a CRE that is resistant to all of the antibiotics tested and is able to grow near the disks.

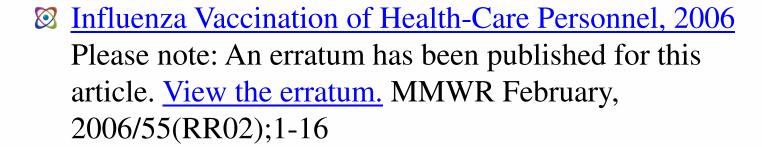


SOURCE: CDC









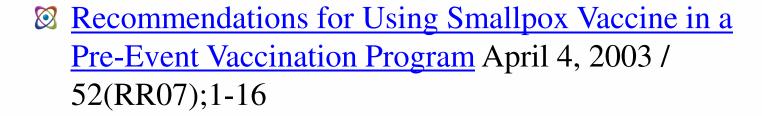
Guideline for Infection Control in Hospital Personnel

1998 PDF (1.04 MB/ 66 pages)

The revised guideline, designed to provide methods for reducing the transmission of infections from patients to healthcare personnel and from personnel to patients, also provides an overview of the evidence for recommendations considered prudent by consensus of the Hospital Infection Control Practices Advisory Committee members.







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Workbook for Designing, Implementing and Evaluating a Sharps Injury Prevention Program [PDF - 2.09 MB]





Guide to Infection Prevention for Outpatient Settings

Download the printable <u>Guide to Infection Prevention for</u>
<u>Outpatient Settings: Minimum Expectations for Safe Care</u>
(includes an <u>Infection Prevention Checklist</u>, Appendix A)







Compendium of Strategies to Prevent HAIs in ACHs

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The Compendium is a concise distillation of current guidelines for the prevention of HAI that brings together recommendations from respected sources.





Compendium of Strategies to Prevent HAIs in ACHs (cont.)

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It is the product of a highly collaborative effort led by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), the American Hospital Association (AHA), the Association for Professionals in Infection Control and Epidemiology (APIC) and The Joint Commission, with major contributions from representatives of a number of organizations and societies with content expertise, including the CDC, the IHI, the Pediatric Infectious Diseases Society (PIDS), the Society for Critical Care Medicine (SCCM), the Society for Hospital Medicine (SHM) and the Surgical Infection Society (SIS).





The Compendium

- Synthesizes best evidence for the prevention of surgical site infections, central line-associated bloodstream infections, catheter-associated urinary tract infections, ventilator-associated pneumonia, *Clostridium difficile*, MRSA, and hand hygiene
- Mighlights basic HAI prevention strategies plus advanced approaches for outbreak management and other special circumstances
- Recommends performance and accountability measures to apply to individuals and groups working to implement infection prevention practices
- Mattp://www.sheaonline.org/PriorityTopics/CompendiumofStrate giestoPreventHAIs.aspx







To Prevent CAUTIS

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- Mark Insert catheters only for appropriate indications
- Leave catheters in place only as long as needed
- Ensure that only properly trained persons insert and maintain catheters
- Insert catheters using aseptic technique and sterile equipment (acute care setting)
- Maintain a closed drainage system
- Maintain unobstructed urine flow
- Comply with CDC hand hygiene recommendations and Standard Precautions





To Prevent CAUTIS (cont.)



Also consider:

- Alternatives to indwelling urinary catheterization
- Use of portable ultrasound devices for assessing urine volume to reduce unnecessary catheterizations
- Use of antimicrobial/antiseptic-impregnated catheters





To Prevent SSIs

Before surgery

- Administer antimicrobial prophylaxis in accordance with evidence-based standards and guidelines
- Treat remote infections-whenever possible before elective operations
- Avoid hair removal at the operative site unless it will interfere with the operation; do not use razors
- ☑ Use appropriate antiseptic agent and technique for skin preparation







To Prevent SSIs (cont.)

10 During Surgery

 Keep OR doors closed during surgery except as needed for passage of equipment, personnel, and the patient

After Surgery

- Maintain immediate postoperative normothermia
- Protect primary closure incisions with sterile dressing
- Control blood glucose level during the immediate postoperative period (cardiac)
- Discontinue antibiotics according to evidence-based standards and guidelines







More on SSI Prevention

Before surgery:

- Nasal screening and decolonization for Staphylococcus aureus carriers for select procedures (i.e., cardiac, orthopaedic, neurosurgery procedures with implants).
- Screen preoperative blood glucose levels and maintain tight glucose control









During surgery:

- Redose antibiotic at the 3 hr interval in procedures with duration >3hrs
- Adjust antimicrobial prophylaxis dose for obese patients (body mass index >30)
- Use at least 50% fraction of inspired oxygen intraoperatively and immediately postoperatively in select procedure(s)









- Remove unnecessary central lines
- Follow proper insertion practices
- Facilitate proper insertion practices
- **Omply** With CDC hand hygiene recommendations
- Use appropriate agent for skin antisepsis
- Choose proper central line insertion sites
- Perform adequate hub/access port disinfection
- Provide staff education on central line maintenance and insertion







To Prevent CLABSIs Outside ICUs (cont.)

Also consider:

- Chlorhexidine bathing
- Antimicrobial-impregnated catheters
- Chlorhexidine-impregnated dressings







To Prevent *Clostridium* difficile Infections (CDI)

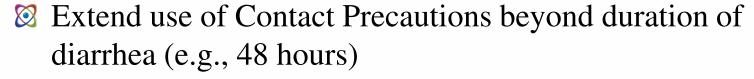
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- **Ontact Precautions for duration of diarrhea**
- **Omply** with CDC hand hygiene recommendations
- Adequate cleaning and disinfection of equipment and environment
- Laboratory-based alert system for immediate notification of positive test results





CDI Prevention



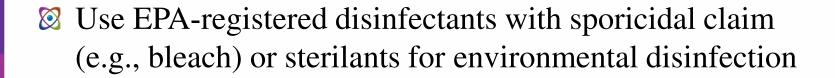


- Presumptive isolation for symptomatic patients pending confirmation of *C. diff* infection
- 🔯 Evaluate and optimize testing for *C. diff* infection
- ☑ Implement soap and water for hand hygiene before exiting room of a patient with *C. diff* infection





CDI Prevention (cont.)



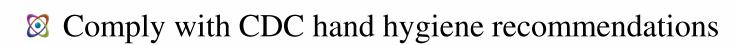
Market Implement an antimicrobial stewardship program

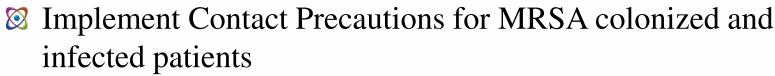












- Recognize previously MRSA colonized and infected patients
- **8** Rapidly report MRSA lab results
- Provide MRSA education for healthcare providers







To Prevent MRSA Infections (cont.)

Also consider:

- **Other novel strategies**
 - Decolonization
 - Chlorhexidine bathing







CDC Slide Sets on HAI Prevention



Slide sets by Device

CAUTI - Catheter-associated Urinary Tract Infection

CAUTI Toolkit [PDF - 483 KB]

CAUTI Toolkit: PowerPoint format [IPPT - 996 KB]
Activity C: ELC Prevention Collaboratives

 CAUTI Baseline Prevention Practices Assessment Tool For States Establishing HAI Prevention Collaboratives [PDF - 229 KB]

CLABSI - Central Line-associated Bloodstream Infections

CLABSI in Non-Intensive Care Unit (non-ICU) Settings Toolkit 7 [PDF - 508 KB]

CLABSI in non-ICU Settings: PowerPoint format [IPPT - 751 KB] Activity C: ELC Prevention Collaboratives

- CLABSI Baseline Prevention Practices Assessment Tool For States Establishing HAI Prevention Collaboratives [PDF - 229 KB]
- Checklist for Prevention of Central Line Associated Blood Stream Infections [7] [PDF 177 KB]

Evaluating Environmental Cleaning

- Options for Evaluating Environmental Cleaning also
- available for download 🔀 [PDF 389 KB]
- Appendices to the Conceptual Program Model for Environmental Evaluation
- CDC Environmental Checklist for Monitoring Terminal Cleaning [PDF 99KB]
- CDC Environmental Checklist W [Word 52 KB]
- Environmental Cleaning Eval Worksheet [Excel 63 KB]

SSI - Surgical Site Infection

• SSI Toolkit 🔁 [PDF - 208 KB]

SSI Toolkit: PowerPoint format [6] [PPT - 468 KB]
Activity C: ELC Prevention Collaboratives

Slide sets by Pathogen

C. diff - Clostridium difficile Infections

• C. diff Toolkit 📆 [PDF -1.5 MB]

available in customizable format

C. diff Toolkit: PowerPoint format [PPT - 4.34 MB]

Activity C: ELC Prevention Collaboratives

• Clostridium Difficile Infection (CDI) Baseline Prevention Practices Assessment Tool For States Establishing HAI Prevention Collaboratives [PDF - 241 KB]

CRE - Carbapenem-resistant Enterobacteriaceae

MRSA - Methicillin-resistant Staphylococcus aureus Infections

MRSA [PDF - 206 KB]

MRSA Toolkit: PowerPoint format [IPPT - 744 KB]
Activity C: ELC Prevention Collaboratives

Norovirus

Norovirus Prevention Toolkit

http://www.cdc.gov/HAI/prevent/prevention_tools.html





Surviving Sepsis Campaign

- The clinical practice guidelines for the management of sepsis, *International Guidelines for Management of Severe Sepsis and Septic Shock: 2012*, were recently updated by the Surviving Sepsis Campaign, which is a joint collaboration of the Society of Critical Care Medicine and the European Society of Intensive Care Medicine (read more about the Surviving Sepsis Campaign)
- Based on these guidelines, the Surviving Sepsis Campaign partnered with the Institute for Healthcare Improvement to create Bundles to help frontline providers implement the guidelines.







Surviving Sepsis Campaign (cont.)



Clinical Guidelines:

Surviving Sepsis Campaign: International Guidelines for Management of Severe Sepsis and Septic Shock: 2012 &

Bundles for Implementing Sepsis Guidelines:

Surviving Sepsis Campaign: Bundles &

Institute for Healthcare Improvement (free registration required): Severe Sepsis Bundles &

Education and Training

American Association of Critical-Care Nurses: Severe Sepsis Practice Alert ☑

Institute for Healthcare Improvement: Treating Sepsis in the Emergency Department and Beyond &

Medscape CME Activity: Guidelines Updated for Management of Severe Sepsis, Septic Shock &

Society of Critical Care Medicine: Sepsis Knowledge Area &

Surviving Sepsis Campaign: Webcasts, Presentations, Podcasts, Videos ₺

Sepsis Screening Tools:

Surviving Sepsis Campaign:

Evaluation for Severe Sepsis Screening Tool 🔁 [PDF - 84 KB] 🛱

Compilation of Sepsis Screening Tools ₽

Society of Critical Care Medicine: Rapid Identification of Sepsis - The Value of Screening Tools &

SOURCE: http://www.cdc.gov/sepsis/clinicaltools/index.html





Certification in Infection Control

- Successful certification indicates competence in the actual practice of infection prevention and control and healthcare epidemiology, and is intended for individuals whose <u>primary</u> responsibility within a healthcare setting is infection prevention and control within that setting.
- http://cbic.org/certification/candidate-handbook/online-handbook/general-information#eligibility
- The total number of certified infection preventionists in Mississippi is 33. We need more CICs!











- ☑ Take advantage of what is available to you. Utilize all resources.

- Work closely with your IP staff. Provide support.





Join Us!

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Be a part of the powerful change taking place in hospitals and nursing homes across the nation.

Join our collaborative.

Contact:

Vickie Taylor, HAI Project Leader 601-957-1575 ext. 245 Vickie.Taylor@hcqis.org



